



17

AAH103

PATENT

Customer No. 22,852

Attorney Docket No. 04208.0077

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)

Makoto SHOZAKAI et al.)

) Group Art Unit: 2654

Application No.: 09/380,563)

) Examiner: A. Armstrong

Filed: September 3, 1999)

RECEIVED

For: SPEECH PROCESSING METHOD)
AND APPARATUS FOR)
IMPROVING SPEECH QUALITY)
AND SPEECH RECOGNITION)
PERFORMANCE)

AUG 14 2003

Technology Center 2600

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R.
§ 1.97(c)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(c), applicant brings to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed after the events recited in Section 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final action, Quayle action, or a Notice of Allowance. Under the provisions of 37 C.F.R. § 1.97(c), this Information Disclosure is accompanied by a fee of \$180.00 as specified by Section 1.17(p).

Copies of the listed documents are attached.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

08/13/2003 ZJUARI

00000038 09380563

01 FC:1806

180.00 OP

documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claims in the application and applicants determine that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: August 11, 2003

By: 

John M. Romary
Reg. No. 26,331

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

INFORMATION DISCLOSURE CITATION

Atty. Docket No.	04208.0077	Appln. No.	09/380,563
Applicant	Makoto Shozakai et al.		
Filing Date	September 3, 1999	Group:	2654

U.S. PATENT DOCUMENTS

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate

RECEIVED

AUG 14 2003

Technology Center 2600

FOREIGN PATENT DOCUMENTS

	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
/AAA/	Jap. Pat. App. No. 05-213946	3/10/1995	JAPAN			
/AAA/	Jap. Pat. Pub. No. 05-102887	4/23/1993	JAPAN			
/AAA/	Jap. Pat. Pub. No. 07-303066	11/14/1995	JAPAN			
/AAA/	Jap. Pat. Pub. App. No. 09-051577	9/25/1998	JAPAN			
/AAA/	Jap. Pat. App. No. 09-056018	9/25/1999	JAPAN			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	S. Haykin, "Adaptive Filter Theory," 2 nd Ed., Englewood Cliffs, NJ, Prentice Hall, 1991.
	Kazuhiko Ozeki et al., "An Adaptive Filtering Algorithm Using an Orthogonal Projection to an Affine Subspace and its Properties," Institute of Electronics, Information and Communication Engineers in Japan, Vol. J67-A, No. 2, pp. 126-132, 1984.
/AAA/	S. Makino et al., "Exponentially Weighted Stepsize NLMS Adaptive Filter Based on the Statistics of a Room Impulse Response," "IEEE Trans. SAP, Vol. 1, No. 1, pp. 101-108, 1993.
	Kensaku Fujii et al., "Double-Talk Detection Method with Detecting Echo Path Fluctuation," Institute of Electronics, Information and Communication Engineers in Japan, Vol. J78-A, No. 3, pp. 314-322, 1995.

INFORMATION DISCLOSURE CITATION

RECEIVED

Atty. Docket No.	04208.0077	Appln. No.	09/380,563
Applicant	Makoto Shozakai et al.	AUG 14 2003	
Filing Date	September 3, 1999	Group:	2654
		Technology Center 2600	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Satoshi Takahashi et al. "Recognizing barge-in speech using NOVO Composition Technique." Nihon Onkyo Gakkai, Kenkyuhappyokai, Koenronbunshu 2-5-1, pp. 59-60, 1996.
	Hisanori Kanasashi et al., "A Word Recognition System to be used in Automobile Noise Environment," Nihon Onkyo Gakkai, Kenkyuhappyokai, Koenronbunshu, 1-Q-32, pp. 139-160, 1995.
	Kunikazu Suzuki et al., "Continuous Speech Recognition in Vehicle Noisy Environment," Nihon Onkyo Gakkai, Kenkyuhappyokai, Koenronbunshu, 2-Q-4, pp. 155-156, 1993.
	Nobuo Kitawaki "Speech Communication Technology--Speech and Acoustics Technologies for Multimedia Services--," Corona Publishing Co., Ltd., Japan, 1996.
	Gadaaki Fumi, "Digital Speech Processing," Digital Technology Series, Tokai University, Shuppan Kai, Japan, 1985.
/AAA/	A. Acero, "Acoustical and Environmental Robustness in Automatic Speech Recognition," Kluwer Academic Publishers, 1992.
/AAA/	Y. Chen, "Cepstral Domain Talker Stress Compensation for Robust Speech Recognition," IEEE Trans. ASSP, Vol. 36, No. 4, pp. 433-439.
/AAA/	J.H.L. Hansen et al., "A Source Generator Based Production Model for Environmental Robustness in Speech Recognition," Proc. ICSLP 94, Japan, pp. 1003-1006, 1994.
/AAA/	M. Shozakai et al., "A Non-Iterative Model-Adaptive E-CMN/PMC Approach for Speech Recognition in Car Environments," Proc. Eurospeech, Greece, pp. 287-290, 1997.

Examiner	/Angela A Armstrong/	Date Considered	07/15/2008
*Examiner:	Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce		